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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,971	04/19/2006	Jensen Peter Akkerman	12114.0003USWO	1961
23552 7590 04/15/2009 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER				
YAM, STEPHEN K				
ART UNIT		PAPER NUMBER		
2878				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,971

**Applicant(s)**

AKKERMAN ET AL.

**Examiner**

STEPHEN YAM

**Art Unit**

2878

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 29, 2009 has been entered. Claims 1, 3-9, and 11-15 are currently pending.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 6-8, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Manique et al. US 5,523,560.

Regarding Claim 1, Manique et al. teach (see Fig. 7A) a method for inspecting packagings for a liquid product including: setting a packaging (10) into rotation, irradiating (614) the packaging during the rotations with a radiation of a predetermined wavelength (see Col. 11, lines 29-50), making at least one series of at least two recordings of at least a part of the content of the packaging during rotation, with an image recording device (632) suitable for making recordings at the predetermined wavelength, wherein the packaging is situated in substantially the same rotational position relative to the recording device during successive

recordings of the series (column 4, lines 1-28), and wherein the packaging is maintained in rotation during the successive recordings of the series (see Embodiment disclosed in Col. 4, lines 47-51, compared with the alternative embodiment disclosed in Col. 4, lines 52-54).

Regarding Claim 6, Manique et al. teach that a plurality of series of recordings are made wherein recordings of the same rank from different series are made successively (see Col. 4, lines 1-28 and Col. 4, lines 60-64).

Regarding Claim 14, Manique et al. teach the radiation of the predetermined wavelength contacting the container at an angle greater than 90 degrees and less than 180 degrees from the axis of rotation.

Regarding Claim 3, Manique et al. teach that the successive recordings of the series are made with an intervening time interval of a predetermined duration (based on the RPM - see Col. 4, lines 47-51).

Regarding Claim 4, Manique et al. teach that the rotation speed is varied during the period in which the recordings of a series are made (see Col. 6, lines 15-19).

Regarding Claim 7, Manique et al. teach comparing the image information from the images of a series to detect the presence of undesired particles in the packaging (see Col. 4, lines 34-46, 58-64).

Regarding Claim 8, Manique et al. teach the image recording device being a camera (CCD array- see Col. 1, lines 39-40) activated to make a recording signal supplied from outside the camera (supplied from CCD sequencer board 709 - see Fig. 8 and Col. 12, lines 4-8, 14-20) ).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al. in view of Ishikawa US 5,072,108.

Regarding Claim 5, Ometz teaches the inspection method in Claim 1, according to the appropriate paragraph above. Ometz does not teach varying the direction of rotation. However, Ishikawa discloses an inspection system that rotates a packaging in two directions (see Abstract). It would have been obvious to one of ordinary skill in the art to vary the direction of rotation in Ometz as taught by Ishikawa, in order to more accurately detect foreign particles (see Abstract).

6. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al. in view of Katane et al. (2003/0063281).

Regarding Claims 9 and 11, Manique et al. teach the method in Claim 1, according to the appropriate paragraph above. Manique et al. also teach a rotator for rotating the packaging (see Col. 4, lines 47-54), a radiating means for irradiating the package with radiation of a predetermined wavelength, and an image recording device suitable for making recordings at the predetermined wavelength for making at least one series of at least two recordings of at least a part of the content of the packaging during the rotation (see Col. 4, lines 58-64). Manique et al. teaches making successive recordings at the same orientation (see Col. 4, lines 58-64) but remains silent regarding a position-determining means for determining the rotational position of

the packaging. Katane discloses (fig. 1) a packaging inspection apparatus with position-determining means (9) (page 2, paragraph 0023). It would have been obvious to one of ordinary skill in the art to incorporate a position-determining means in Manique et al. as taught by Katane, to more accurately control the rotation of the packaging.

7. Claims 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manique et al.

Regarding Claims 12 and 13, Manique et al. teach the method recited in Claim 1, according to the appropriate paragraph above. Manique et al. also teaches the image recording device providing detection an angle ranging from greater than 90 degrees and less than 180 degrees from the container's axis of rotation. Regarding Claim 13, Manique et al. teach the radiation of the predetermined wavelength contacting the container at an angle greater than 90 degrees and less than 180 degrees from the axis of rotation. Manique et al. do not teach the image recording device *positionable* at 90-180 degree angles. It is well known in the art to provide adjustability for a light source and for a detector in an optical sensing system, to provide improved versatility and adapt the device for various bottle shapes and configurations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image recording device *positionable* at 90-180 degree angles, in the method of Manique et al., as it has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

Regarding Claim 15, Manique et al. teach the packaging maintained in rotation during the successive recordings of the series (see Embodiment disclosed in Col. 4, lines 47-51, compared with the alternative embodiment disclosed in Col. 4, lines 52-54).

***Response to Arguments***

8. Applicant's arguments filed January 29, 2009 have been fully considered but they are not persuasive.

Applicant argues that Manique "does not teach or suggest imaging of the packaging as rotated... [c]onversely, Manique has stationary images." (Applicant's 1/29/2009 arguments at 7). Examiner respectfully disagrees.

Manique teaches rotating the bottle to provide multiple images of a single location to detect foreign bodies in the liquid. Manique accomplishes this by taking successive images of the same location of the bottle while the liquid in the bottle is rotated:

For dynamic images, i.e. foreign body detection, rates of angular rotation and scanning rates of the detection apparatus are chosen such that line scans may be provided at relatively high rates of rotation of the entity to be inspected. During these high rates of rotation line scans are provided differentially such that individual segments are scanned successively at given heights (*sp*) during one or more revolutions.

According to the invention, the rate profile comprises rates of rotation that causes the liquid to circulate and bodies having densities larger than that of the liquid to accumulate at the container wall. Thus, even for nontransparent suspensions and emulsions, foreign bodies at the container wall can be detected.

(Col. 4, lines 34-46)

Thus, Examiner asserts that Manique teaches the limitations in Claim 1.

Applicant also argues that Manique does not teach that the scan is made in the same position. Examiner asserts that since Manique discloses a continuous rotation and scanning (see Col. 4, lines 2-9, 34-46) that multiple scans are made of the same position.

Applicant further argues that Manique does not teach "a reference image of the entire surface." (Applicant's 1/29/2009 arguments at 7). Examiner asserts that such a limitation is not recited in the claim language.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN YAM whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571)272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen Yam/  
Primary Examiner, Art Unit 2878